Public Works Digest

Volume XI, No. 5
May 1999

A publication of the U.S. Army Corps of Engineers Installation Support Center

In This Issue...

IFS SCP #12-00

- Service Order Standalone
- Property Book
- Credit Cards
- Supply

US Army Corps of Engineers®

Public Works Digest

May 1999
Vol. XI, No. 5

US Army Corps of Engineers®

Automation

Installation Management

Environment

Professional Development

Public Works Digest is an unofficial publication of the US Army Corps of Engineers Installation Support Center, under AR 360-81. Method of reproduction: photo-offset; press run: 3,000; estimated readership: 40,000. Editorial views and opinions expressed are not necessarily those of the Department of the Army.

Address mail to:

Department of the Army
US Army Corps of Engineers
Installation Support Center
Attn: Editor, ***Public Works Digest***,
CEISC-P
7701 Telegraph Road
Alexandria, VA 22315-3862
Telephone: (703) 428-6404 DSN 328
FAX: (703) 428-7926
e-mail: alex.k.stakhiv@usace.army.mil

Kristine L. Allaman, P.E.
Director—U.S. Army Corps of Engineers Installation Support Center

Alexandra K. Stakhiv
Editor

Design and Layout:
Susan A. Shugars
RPI Marketing Communications
Baltimore, MD

Printed on recycled paper.

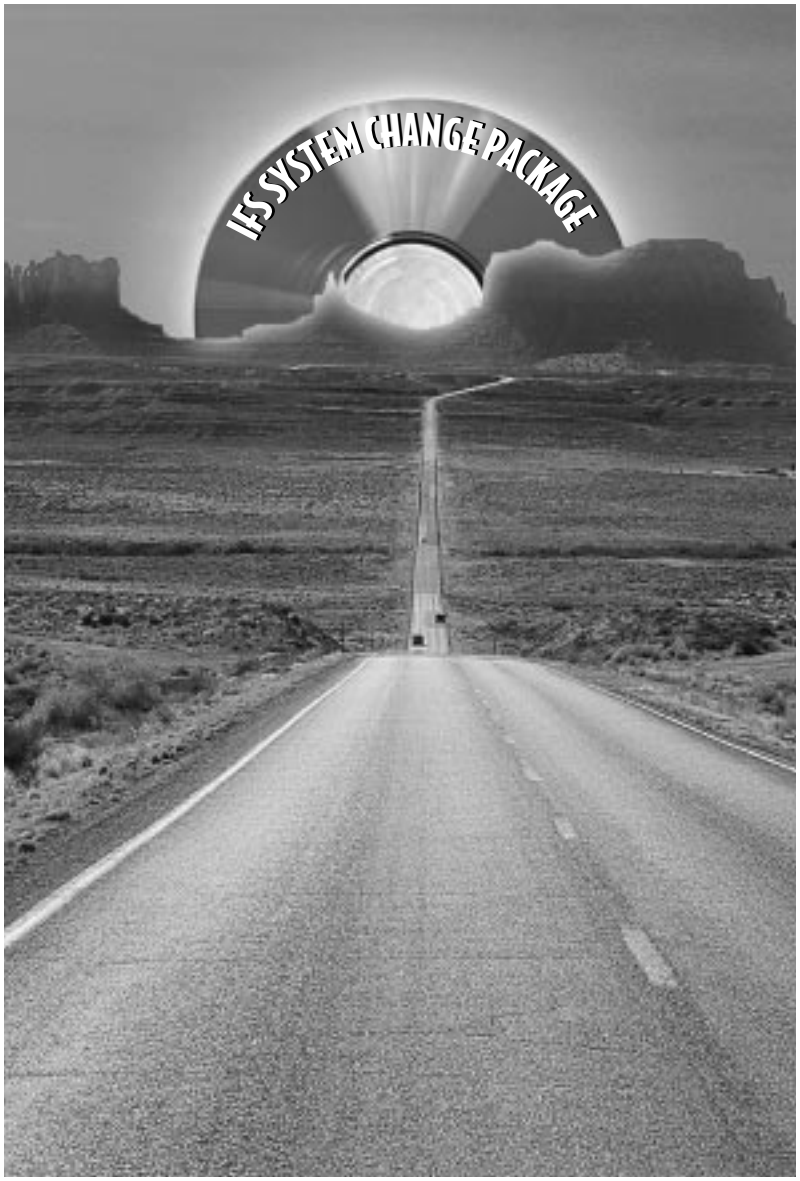
IFS UPDATE...IFS UPDATE...IFS UPDATE...IFS UPDATE...

IFS—Changing for the better

by Lanny Beaty

The Integrated Facilities System (IFS) is undergoing changes to better support DPW business practices and requirements established by the Chief Financial Officer's (CFO) Act.

IFS System Change Package (SCP) #12-00 will provide a new Credit Card module, a new Service Order Standalone module, and Y2K changes to the Supply and Property Book modules. This SCP is currently undergoing quality assurance testing and is targeted for broadcast by June 1999. The new Credit Card module will account for the use of credit cards to purchase service and, where the Supply 2000 Commercial Off-the-Shelf (COTS) has not been installed, materials. This Credit Card module will allocate costs to service orders or work orders and assist in the reconciling of the monthly activity. The IFS Supply module has been modified to insure that it is Year 2000 compliant. No other changes were made to Supply.



At the same time, the Engineer Property Book system was also modified for Y2K compliance. The Database III version of the Service Order Micro has been updated to use the Oracle® database. This will require the use of a PC running NT operating system. The screen looks and functions exactly the same as the current IFS-C/S SO input screen.

IFS Interim Change Package 12-01 (targeted for broadcast in mid-August 1999) will address the CFO changes in the accounting for Army property. This will require the automated interchange of data between IFS-C/S and the DPAS (Defense Property Accounting System) systems. Major changes will be seen in the Real Property capitalization area.

The next big IFS change (SCP #13) will be broadcast early in the second quarter of FY00 and will provide a new Contract Management module. With help from the Fort Lewis folks, this new module is being built to support all types of DPW contracts and will be able to operate in a standalone mode, if required.

Also, please note that the Supply 2000 COTS product is now available to the DPW community. This COTS system replaces the IFS Supply module and will run/operate on the IFS server concurrently using the same Solaris Unix Operating System (OS) and ORACLE database. (Reference CEISC-FS Memorandum for Directors of Public Works, dated 09 February 1999, Subject: IFS/SUPPLY COTS.) For details related to deployment of the COTS, please contact Jim Godwin at (804) 734-2642 DSN 687 or Jim Asbury at (804) 734-0230 DSN 687.

For more information on these topics, please contact Lanny Beaty at (804) 734-0029 or e-mail: beatyl@lees2.army.mil PWD

Lanny Beaty is the Chief of ISC's Systems Development and Maintenance Division at Fort Lee, VA.

DoD selects DPAS for property accountability and financial reporting

by Ken Ralph

The Chief Financial Officer's Act (CFOA) has been in existence for nine years but has not appreciably impacted the DPW to date. However, change is on the way and will arrive later this year. CFOA was introduced in 1990 as Public Law 101-576 and requires the introduction of more effective financial management practices, audited financial statements for all funds, and the integration of financial and functional management systems.

Since 1990, the Federal Accounting Standards Advisory Board (FASAB) has recommended a number of accounting standards that have been approved for implementation by OMB, GAO and the Treasury Department. These, in addition to the mandates of several subsequent and related Acts, have been implemented via DoD Financial Management Regulation 7000.14-R as DoD policy.

The Army, as well as much of DoD, has failed to achieve an unqualified audit opinion of its financial statements in several areas since these laws were introduced. Consequently in 1998, the White House issued an Executive Order requiring compliance with the various financial laws and established the objective of achieving an unqualified audit opinion.

What does this mean to the DPW? Several of the deficiencies repeatedly cited by the auditors are in the area of accountability for both personal and real property. The Army's Annual Financial Report must include the depreciated value of all real property based on acquisition value and subsequent improvements. The source must be an accredited system designed to capture each asset along with the appropriate budgetary and fiduciary information. Ultimately, each asset record in this system must be fully supported with source documentation. In the case of real property, this must be a DD 1354 reflecting acceptance of the facility or improvement.

The system selected by DoD to establish property accountability and provide financial reporting is the Defense Property Accounting System (DPAS). Each facility and capital improvement the Army owns, or has a vested financial interest in, and meets the financial threshold for recording (presently $100,000), must be contained in DPAS by the end of FY 1999. Further, select facilities must be identified as heritage or national defense assets. The Army's plans to accomplish this through the creation of an interface between the Integrated Facilities System–Client Server (IFS-CS) and DPAS.

To accomplish this goal, a number of actions must be completed in the next few months:

- Each Army and Army Reserve site, including BRAC locations, must transition their real property inventory to IFS-CS, if not already using this version of IFS. Plans are now being made to transition off and eliminate the Real Property Standalone (RPS) system.
- Every site must ensure the latest version of IFS-CS is loaded to include System Change Package 12. The DPAS interface will be released as Interim Change Package 12-01 in mid-August.
- Installation personnel must be trained in the functionality of the IFS-DPAS interface and new data required to sustain the interface. MACOM-wide training sessions are being planned for this purpose and will be conducted during the summer months.
- Select data must be verified for accuracy in IFS after ICP 12-01 is loaded, and the interface with DPAS must be initiated prior to September 30, 1999.

Interface data will flow both from IFS to DPAS and from DPAS to IFS. IFS will be the source of DPAS information for all property in which the DPW has accountability and a financial interest.

Improvements initiated by DoD activities and other tenants having a financial interest in the cost of the improvement will be recorded in DPAS by the tenant organization. The cost of these projects will be sent from DPAS to IFS. DPAS will also send to IFS the cumulative cost of depreciation for each facility and improvement.

The advent of this interface will draw additional elements of the DPW staff into the recording process for new facilities and capital improvements. A number of additional data elements must be entered at the time the facility/improvement is accepted for occupancy. Some are financial in nature and are associated with the project that authorizes the work to be accomplished. Others categorize the facility to insure that it is accurately reported in the proper financial statements. Since the Real Property Accountable Officer will not have access to this information, it must be obtained from the project manager and/or the DPW budget officer. A new IFS screen has been added to capture this data.

A significant change in the IFS recording procedure is that capital expenditures will now be captured by facility rather than by design use category code. This will help simplify the process when a new facility or improvement benefits most or all of a multi-use facility. Existing IFS capitalization records will be restructured accordingly. Part of the reason for this change is to establish a one-to-one relationship between the records contained in DPAS and those in IFS.

USAREUR sites will see one additional change that is unique to that command. The ENGBASE system will be eliminated and all capital improvement (1354) records will be converted to IFS. Also the residual/current value calculations and reports now produced by ENGBASE will be produced by IFS once this change is implemented.

Installations can expect to see additional correspondence and significant emphasis placed on this initiative in the coming weeks as it carries a high priority in the Army staff.

POC is Ken Ralph, CEISC, 804-734-2631. PWD

Ken Ralph is a management analyst in ISC's Systems Development and Maintenance Division at Fort Lee, VA.

ISC and Fort Lewis developing IFS Contract Management System

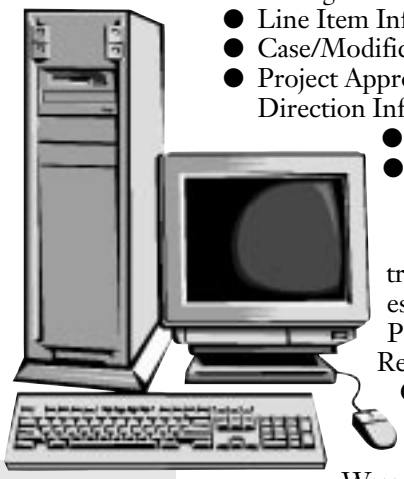
by Tom Pitchford

Did you know that the Installation Support Center (ISC) has partnered with Fort Lewis DPW to develop a Contract Management System? This system will replace the outdated Contract Administration function currently in IFS.

The IFS Contract Management System will enable you to manage contract requests for work from conception to contract completion.

The system may be used as a standalone system on a separate server or it may share space on your IFS server. It is being developed using Oracle Development and Designer tools and will be accomplished using a modular approach.

You will be able to Package contract work requirements, select line items from Work Requests for managing Financial — as well as — Project Approval, identify Case/Modifications to existing contracts, create Package and Contract Teams, identify and execute paperless system document Routing, and develop Package, Case, Line Item, and Mod Schedules.



You will be able to manage contract requests for work from design/study through acquisition, and construction progress, inspection, to contract completion.

The Contract Management System will be developed in two phases. The first phase will be broadcast to the field early in the year 2000. Phase 1 will contain subfunctions which will include:

- Domain tables for validation of data.
- Package Information.
- Line Item Information.
- Case/Modification Information.
- Project Approval and Financial Direction Information.
- Team Schedules.
- Post award Progress Schedules.

You will be able to track current working estimates (CWE) by Package and Work Request (Facility, Work Classification, and Customer), as well as track and manage Extended Warranties.

Phase 2, which will be developed following the release of Phase 1, will include:

- Acquisition Forms (Purchase Request (DA 3953).
- Purchase Order (DD155).
- MIPR (DD1155).
- Amended Solicitation (SF30).
- Interfaces with the Standard Procurement System (SPS), DCAS/STANFINS, and CEFMS.
- Submittals (Eng Form 4288).
- Progress Payments.
- L&E processing by Package.

We are also planning to link CMS with the IFS Credit Card module and develop reports which will allow you to better manage resource utilization and project execution.

If you have any questions regarding the new IFS Contract Management System, please contact Tom Pitchford, ISC Project Leader for CMS, at (804) 734-2646 DSN 687, or FAX (804) 734-0655. PWD

Tom Pitchford is an automated engineering systems specialist in ISC's Systems Development and Maintenance Division.

SUPPLY 2000 COTS deployed

by Jim Godwin

On February 9, 1999, a USAISC Memo signed by IFS Program Manager Leo Oswalt was sent to the the DPW community (SUBJ: IFS/SUPPLY COTS) discussing Supply 2000 COTS, the software capabilities, hardware requirements and deployment methodology.

The Memo also stated that deployment would cost $6,500 per site on a reimbursable basis. Deployment consists of loading the new software, converting the current Supply database to the new system, Systems Administrator training, and user training and hands-on desk side assistance.

After a successful MACOM/installation user review/test at the Design Center Lee office last fall, the Supply 2000 COTS was installed at West Point and tested over a period of time in a live environment. Recommendations resulting from the reviews/test indicated that the COTS should be deployed as soon as possible. Deploying Supply 2000 as the replacement for IFS/Supply will provide state-of-the-art automation support for installation supply operations.

The system was deployed to Fort Huachuca, Arizona, in March 1999, and is currently scheduled for deployment to Fort Monroe and Fort Sill in April 1999. Three sites in Europe are scheduled for May 1999 — Wuerzberg, Kitzegen and Ansbach. Fourteen other sites have already sent funds (MIPRs) and are in the queue for deployment in the near future.

Please contact Jim Godwin at (804) 734-2642 DSN 687 or Jim Asbury (804) 734-0230 DSN 687 to address deployment schedule questions, funding and dates. PWD

Jim Godwin is an automated engineering systems specialist in ISC's Systems Development and Maintenance Division.

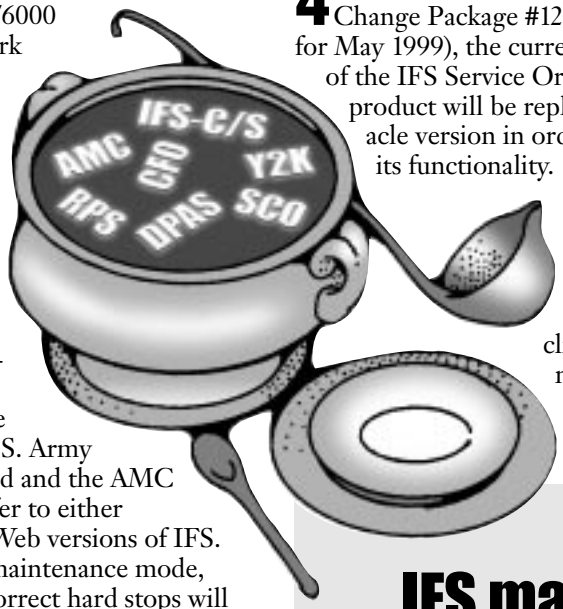
IFS Cookbook update

by Lanny Beaty

The latest revision to the IFS COOKBOOK (Revision #3) is now in print and should be mailed to the DPW community in May 1999. This revision provides the latest migration and technical information related to IFS addressing such items as the IFS Client Server, World Wide Web (internet) upgrade, IFS Architecture, future objects and more.

Here's some of the information provided in the Cookbook for planning purposes:

1 The Client Server (IFS-C/S) and Web (IFS-W) versions of IFS are the only two baseline products that will be supported after 1 October 1999. The Unisys 5000/6000 and Solaris network versions (10-xx baselines) will no longer be supported after that date.



2 Sustainment support to the RPS Real Property Standalone (RPS) product will move to a strict maintenance mode once the U.S. Army Reserve Command and the AMC community transfer to either Client Server or Web versions of IFS. Under the strict maintenance mode, only changes to correct hard stops will be made to the RPS system software. Sites planning on continuing use of the RPS product after 1999 are reminded that it is necessary to migrate to the Office 97 version of ACCESS and RPS in order to be Y2K compliant. It should also be noted that the RPS will not be modified to support the Defense Property Accounting System (DPAS) interface. This interface is required to be in compliance with the Chief Financial Officer's (CFO) act.

3 The existing IFS Supply Module software will be made Y2K compliant with the broadcast of System Change Package (SCP) #12-00 scheduled for May 1999. Sites operating the IFS Supply System on old hardware (Everex 486 servers) are reminded that to be Y2K compliant, the Supply Module must be moved to a Pentium level processing server and upgraded to the SCO operating system. This must be accomplished by the end of 1999, unless a site plans to replace the IFS Supply Module with the Supply 2000 COTS (Commercial-Off-the-Shelf) system by that date. The Supply 2000 product will operate on the IFS server concurrently using the same Solaris Unix Operating System and ORACLE database.

4 With the release of IFS System Change Package #12-00 (scheduled for May 1999), the current DB3 version of the IFS Service Order Micro product will be replaced by an Oracle version in order to improve its functionality. This new Oracle version will function and operate like the IFS service order clients. Please note the new IFS Service Order Micro product will require a hefty work station (computer) to operate with acceptable performance (a Pentium 200 or better running Microsoft NT Operating System, 64 Megs of RAM, and 150 Megabytes or more of hard disk space). Sites utilizing numerous Service Order Micro stations may wish to incorporate a mini-Lan between the Service Order Micro work stations (use one of the work stations as a server and network it to the other as clients). Reliable communications with the existing IFS network are required to maintain system tables and to upload/download service order data.

5 Any System Change Package (SCP) released after January 2000 will support the 32-Bit architecture only. This means that upon installation of that and subsequent SCPs, Windows 3.11 and Windows for Workgroups will no longer be supported by IFS. The clients used for IFS must have Windows 98, Windows 95, or NT Workstation installed to fully utilize IFS after the 32-Bit implementation. This move will improve processing time and reduce support requirements to one baseline.

POC is Leo Oswalt at (703) 428-7120 DSN 328. PWD

Transfer of IFS maintenance and support

In compliance with the FY99 HQUSACE Military Programs reengineering initiative, the IFS maintenance and support mission is being transferred from the ISC (U.S. Army Corps of Engineers Installation Support Center) to the Huntsville Engineering and Support Center (CEHNC). The IFS Program Manager function is being transferred from ISC to an Installation Support Division within USACE Military Programs. The resources currently at the Fort Lee ISC office performing the day-in and day-out hands on sustainment support are being reassigned to CEHNC but will remain in place through FY02. The Corps of Engineers' support to IFS will remain strong in the years to come with the goal of providing the best automation support possible to the DPW community.

POC is Lanny Beaty, (804) 734-2012 DSN 687. PWD

Evaluating Oracle 8

The following message from Oracle "marketing" was used to make the point that Oracle 8i is now ready for shipping. The message DOES NOT mean that the current version of Oracle that IFS is using is not Y2K compliant. The IFS product is currently evaluating Oracle 8 and developing a plan to distribute the new Oracle products.

Questions/comments may be forwarded to Mike Christos, (804) 734-2837 DSN: 687-2837.

Dear Y2K Program Manager,

We know you've been hard at work getting ready for January 1, 2000. But, as the date approaches, you may find yourself with more left to do than your staff can handle.

In fact, while many customers know that today's current Oracle products are fully Y2K-compliant, our records indicate that your company may still be using unsupported versions of Oracle servers and tools. The good news is that Oracle is here to help. We're ready with a special offer that will improve your Y2K readiness.

For a limited time, we're offering a free upgrade to the most recent version of the Oracle products that you previously licensed. Just call before April 30, 1999, and we'll send your free Oracle Upgrade 2000 CD that includes full working versions of Oracle 8i and supporting tools. Oracle 8i is fully Y2K-compliant—and it also offers much more.

As the only database specifically designed as an internet development and deployment platform, Oracle 8i extends technology leadership to deliver the most scalable, reliable and cost-effective solution for any business — large or small. To assist your migration to the latest Oracle technology, you can also contact us about our full range of support services.

This free offer is valid until April 30, 1999. Please call 1.800.833.3536 today, and we'll send your free Oracle Upgrade 20000 CD immediately.

Sincerely,

Randy Baker

Randy Baker
Executive Vice President
Oracle Support and
Education Services

P.S. This is a limited time offer—call today for your free Oracle Upgrade 2000 CD. PWD

Corps' automated construction management system enhances engineering activities

by Marnah Woken

The U.S. Army Corps of Engineers' Theater Construction Management System (TCMS) is a computerized planning, design, management and reporting system used by Army engineers for construction activities.

Originally developed in 1990 by the Corps' Construction Engineering Research Laboratory (CERL), at the request of the Office of the Chief of Engineers, TCMS automates engineering activities previously performed manually — making the design and construction process much easier.

"TCMS offers a vast array of designs for projects as simple as guard towers to something as complex as full blown base camps," said Scott Lowdermilk, TCMS Coordinator for Europe District. "One of the biggest benefits to TCMS is that it's much easier to use than its predecessor."

"I'm a battalion construction officer, so it's important for me to know how construction is going and if it's being done correctly," said 1st Lt. John Morrow of the 94th Engineer Headquarters and Support Company in Vilseck. Morrow recently attended TCMS training and added, "I'll be able to use this program for project planning and management."

"For example, if we want to build a warehouse with certain dimensions, interior electricity, and a concrete pad, I can go to this program and pull up what I want. I can add or subtract details and come up with a pretty good estimate of how long the project will take, what materials and labor are needed, and how much it's going to cost."

"It's a lot better than the old system which involved working with a lot of old manuals," Morrow added. "I also like the fact that you can use the TCMS database with Microsoft Project software to get a visual picture of what you want."

Before TCMS was created, military personnel used design manuals from the Army Facilities Components System, along with several other large technical manuals, according to Lowdermilk.

"TCMS eliminates the time previously spent performing design functions manually, calculating labor and cost estimates, and other functions," he said. "Now the same soldier just needs a computer with a CD-ROM to have all of the same information at his or her fingertips."

Europe District provides TCMS training for active duty, reserve, and civilian personnel throughout U.S. Army, Europe, according to Lowdermilk, who added the TCMS program is currently being used by engineers in the Bosnia theater of operations.

"Over the past two years, we've provided training to over 90 active duty and reserve Army engineers. Classes are generally two to three days in length, depending on student needs, and centrally funded by the Department of the Army so there's no cost for the training or the software."

The training package includes the TCMS program as well as two commercial software packages — AutoCAD LT and Microsoft Project.

"AutoCAD LT is needed to view and manipulate designs, and Microsoft Project is an added bonus that allows the user to manage a project from cradle to grave," Lowdermilk added.

CERL transitioned TCMS to the Corps' Huntsville Engineering and Support Center District for management. Huntsville began further developing the program in 1993, and continues to maintain, distribute and provide hands-on training.

Combining state-of-the-art computer hardware and software, classes provide information on project planning, design, management, reporting, and communication.

"The classes familiarize students with the TCMS system so they can learn to develop and manage projects," said Sandra Mayes, TCMS Support Personnel from the Huntsville Engineering and Support Center.

"I'm a construction platoon leader and this class will help me with planning and managing our construction projects," said 2nd Lt. Amanda Pomnerenck of Alpha Company 94th Engineer Combat Battalion in Vilseck.

"This is a good, straight forward program with plans for a lot of different projects. I can use the TCMS program for project plans to get a general idea of the project cost and how many people I'll need. This gives me a good base for planning," she added.

SPC Darren Rouse, Headquarters, Headquarters Company, 130th Engineer Brigade in Hanau is a surveyor in the construction management section, and recently completed TCMS training.

"This is becoming the industry standard," said Rouse. "I hope everyone who's involved with construction will have a chance to use it. It really opens up your eyes to what's going on outside of just one particular task on a project."

"The students seem very pleased with the program and they all seem to be impressed with the product," said Fred Steinman, TCMS Support Personnel from the Huntsville Engineering and Support Center. "The class gives them a basic knowledge of what the program can do. They can use the basic information in the program as a starting point and then develop a project that suits their particular needs."

TCMS training has been conducted in Germany, Korea, Japan, Hawaii, and Panama, according to Steinman. "Anywhere you find the Army Corps of Engineers in the world, we've done the initial training," he said.

For more information on TCMS training with Europe District, please contact Scott Lowdermilk at civilian 0611-816-2642 or DSN 336-2642.

More details can also be found on the internet at http://www.hnd.usace.army.mil/tcms/index.htm PWD

Marnah Woken is a public affairs specialist in the Europe District Public Affairs Office.

Web-enabling the Programming, Administration and Execution (PAX) System

by Michael Rice

The Programming, Administration, and Execution (PAX) System provides the U.S. Army with Information Technology (IT) automated tools which allow engineers throughout the world to develop, estimate, justify, submit, review, approve and then track the Army's annual construction program budget submissions. PAX applications additionally allow engineers to track (design, construction and fiscal information from project submission through construction completion and fiscal closeout) construction projects for the Army.

PAX supports the Army, HQDA, OACSIM, USACE, other DoD agencies, and installations during the planning, programming, budgeting, and execution of MILCON programs in support of U.S. Army missions and the U.S. Army Corps of Engineers mission. PAX also supports HQDA with automated MILCON information for critical Army systems (RFS, C1 Annex, ODISC4), and DoD Medical (Army, Navy and Air Force customers) with the DD Form 1391 Processor.

PAX IT applications include the DD Form 1391 Processor, the Construction Appropriations Programming, Control and Execution (CAPCES) System, the Economic Analysis System (ECONPACK), the PC-COST system and the Accounting Control System (ACS).

Project Initiation

The initiation of the web-enabling work was the result of compliance with FISTPAT recommendations as well as several months of discussion regarding the future of PAX. CEMP-MC initiated a study for the web-enabling of the PAX system in December 1997. CEMP-MC employed the Construction Engineering Research Laboratory (CERL) and a unique group comprised of Corps employees and PAX Contractor support personnel with 10–15 years experience with PAX (Electronic Data Systems, McClendon Automation Corporation) to participate in this study. It recommended modernizing the look of PAX by using modern technologies not available when PAX was initially fielded. It determined that the best alternative for PAX was to Web enable it.

Feedback from system users indicated satisfaction with the basic functionality of PAX system applications. The PAX application user interfaces are antiquated (developed in the late 1970s) and were not designed to take advantage of current technology. The plan devised to web-enable PAX incorporates these factors as well the reality of a limited availability of funds to finance the enterprise.

The web-enabled PAX will give users a modern look and the capability to access its applications using browser technology without changing any of the existing functionality or capabilities of its current applications.

The project includes the conversion of PAX operations from an X.25 commercial network (TYMNET) mainframe environment using packet switched worldwide communications (including some FTS2000 DTS lines) to a Transmission Control Protocol/Internet Protocol (TCP/IP) >Enterprise server technology using frame relay communications and the worldwide web. Areas of consideration for the web-enabling of PAX will be to secure Intranet configurations housing the actual PAX applications, Graphical User Interfaces (GUI), databases, Common Gateway Interfaces (CGI) and web servers. CEMP-MC is also using web-enabling technology such as the use of web browsers, fire walls, JavaScript, CACTUS, Hyper Text Markup Language (HTML), VM:Webserver (Office Vision, Gateway, etc), WebFOCUS, Web390 and JAVA.

Current Status

The PAX web-enabling project is currently underway. CEMP-MC as employed the COE, Huntsville Center, and its own contractors, Electronic Data System, McClendon Automation Corporation, and Richardson and Kirsee Engineering Incorporated. A *BETA* version of Phase I of the web-enabled DD Form 1391 Processor and CAPCES Systems was released on 1 March 1999 to a select group of PAX users for testing purposes. This version has limited dial-up capability. Upon completion of the *BETA* testing, the release of web-enabled PAX using full TCP/IP access will be released to all PAX users. Users will have:

- Access to the systems through web browsers.
- Current functionality of the systems which has not changed.
- A modern, new appearance of the current applications.
- A modern, new way of using the systems.
- Use of a TN3270 environment for executing full screen applications which will also be used by developers and users to develop and test code. (It will also be used as a contingency backup access to PAX if a problem with the Internet arises.)

User requirements

PAX users will need a PC with Windows 95 (or greater), an Internet connection, Internet Explorer 4.0 (or greater) with Service Pack 1.0 or Netscape 4.07 (or greater), and an understanding of how to use windows software with a mouse. In addition, TN3270 users will need a software package such as QWS3270 (shareware) or equivalent software to execute the environment.

Future Plans

The second through fifth phases of work will be completed. This work will ➤

Computer programs available for design/evaluation of pavements and railroads

There are 20+ computer programs available to help design and evaluate your pavements and railroads at http://pavement.wes.army.mil/pcase.html. These programs were developed by the Corps of Engineers through the Pavement-Transportation Computer Assisted Structural Engineering (PCASE) program. If you haven't visited the site, take a look.

In addition to the programs that design and evaluate pavements, we also offer programs that give: temperature data (precipitation data is in the works), frost depths, aircraft information, lists of documents you need for a particular design, a soil stabilization guideline, as well as pay adjustments. We also offer electronic files of standard detail drawings for pavements and railroads in both Intergraph and AutoCADD.

Once on-line, you will find four programs with "E" at the beginning (i.e., E-DRAIN). These are the new on-line use programs. Rather than downloading the program, you can run the program on-line. It's quick, it's easy, and you are assured the latest version of the program.

PCASE also offers regional workshops to District offices. The workshops provide "hands-on" training on the use and availability of the computer programs. We also cover some of the basics of design and evaluation criteria. The workshops are 2-3 days depending on the number of programs the hosting District would like to cover. Installations are invited to attend at no cost. A schedule of upcoming workshops is posted on the PCASE homepage.

Join the PCASE e-mail group by submitting your e-mail address to mary.j.adolf@usace.army.mil. You'll be notified electronically when programs are updated, new programs are released and workshops are upcoming. Get your name in today to get the latest information tomorrow.

For more information on PCASE, please contact Mary Adolf, USACE Transportation Systems Center, (402) 221-7265. PWD

(continued from previous page)

depend on obtaining additional funding. Efforts to obtain this funding are already underway.

A feasibility study of the DD 1391 Processor will be conducted to include:

- The capability for loading digitized images (photographs, site plans) into the Processor System with links to the appropriate DD1391 form.
- The capability to view photographs/site plans.
- The capability to archive photographs/site plans with approved/enacted DD1391 forms.

The final product of the PAX web-enabling efforts will be a PAX system that incorporates modern technology allowing PAX users to access PAX applications with multiple Browser technology (Internet Explorer, Netscape). It provides PAX users with a modern look and is much more user friendly incorporating Graphical User Interfaces (GUI). It will also result in CEMP-MC saving considerable funding by not requiring X.25 communications. Supporting photographs/site plans will be stored with the appropriate DD1391 form and accessible by all activities with access to the DD1391, such as the major subordinate command, the major command, COE districts/divisions/headquarters, and DA reviewers/approvers.

Tri-service Potential

The PAX applications could accommodate the requirements of the other services in the future. The PAX system DD Form 1391 Processor System web-enabling effort has been demonstrated to the Navy which expressed interest in it. The Navy's system does not contain comparable functionality. DoD could save considerable funds by not reinventing the wheel for the other services when PAX applications are already available. Tri-service use of the PAX system could result in increasing the number of users, reducing cost per user.

Points of Contact

A group e-mail list can provide you with news, information and instructions. To get subscribed to the Web-PAX group list:

- E-mail: webpax-subscribe@egroups.com
- Visit the web page at: http://www.egroups.com/list/webpax/
- Send an e-mail to Bill Crambo at bill.crambo@usace.army.mil simply requesting to be added to the Web-PAX group list.

POC is Michael Rice, CEMP-MC, (202) 761-8908. PWD

Michael Rice works in the Military Programs Dierctorate at Headquarters.

Risk management compliance—Are you ready?

by Robert W. Fenlason, III

The U.S. Environmental Protection Agency (USEPA) has modified the Chemical Accident Prevention Rule (CAPR) codified in Title 40, Code of Federal Regulations, Part 68 (40 CFR 68). This amendment was promulgated under the Clean Air Act Amendments of 1990. The CAPR requires owners and operators of stationary sources subject to the CAPR to submit a Risk Management Plan (RMP) by 21 June 1999.

The Risk Management Rule, effective 5 February 1999, requires four mandatory and five optional RMP data elements using the new industry classification system, the *North American Industry Classification System (NAICS)*, replacing the *Standard Industrial Classification (SIC)* codes. It also requires that all installations storing or using quantities of hazardous chemicals exceeding the prescribed threshold limits, listed in Tables 1 through 3 to Section 68.130, must prepare a Risk Management Plan, and submit this plan to USEPA. Hefty penalties are mandated for noncompliance. As a minimum, this rule applies to water treatment plants, swimming pools, and wastewater treatment plants that use chlorine gas, anhydrous ammonia, and/or sulfur dioxide.

The Risk Management Rule is very similar to the OSHA Process Safety Management Regulation. Both rules require the facility to examine its work processes, analyze potential failure conditions and develop response plans in case an emergency condition develops. The key difference is that the Process Safety Management Rule is focused on worker safety; the Risk Management Rule is focused on offsite consequences. As a result, the Risk Management Plan must contain computer modeling and an analysis of the likely impact area under both worst case and alternative failure conditions.

Preparing a Risk Management Plan can be a confusing, time-consuming task. The Huntsville Engineer Support Center ISCX can assist by preparing a Risk Management Plan using an Indefinite Delivery Type (IDT) contract with an Architect-Engineer (AE) firm. The AE can provide the resources needed to develop the Risk Management scenario, prepare a site-specific Risk Management Plan, and assist with the procedures for submitting the plan to the central point specified by USEPA.

POC is Robert W. Fenlason, III, CEISC-ES, (703) 806-5201 DSN 656. PWD

Robert Fenlason works on water and wastewater issues at ISC.

Army Facility Reduction Program and Army Lease Reduction

by Monica Malia

The drawdown of Army forces has created a tremendous amount of excess space on Army installations. At the same time, the Army is spending over $260 million a year for commercial lease space. In an effort to address both of these issues, the Assistant Chief of Staff for Installation Management (ACSIM) was given the task of both reducing excess space on installations and, at the same time, reducing the amount of commercial lease space. The programs that accomplish these goals are the Facility Reduction Program (FRP) and Lease Reduction Program (LRP). These programs work hand-in-hand in an effort to fully use existing Army infrastructure versus paying for leased space.

The FRP is used to reduce the amount of excess space on Army installations. Funding to demolish and dispose of excess facilities is allocated to major Army commands each year based on their installations' input to the 5-year FRP plan. Of the 150 million square feet (MSF) of excess space identified in 1992, over 47 MSF have already been demolished, with an additional goal of 53.2 MSF remaining for demolition. There is $100 million per year from FY 98-03 programmed to accomplish that goal.

The LRP improves utilization by rehabilitating excess space and filling it by moving organizations out of leased facilities. Installations with excess space can help activities in commercial leases find a new home—this is where the Army benefits. The Army's goal for LRP is to save $70 million per year, beginning with FY 03. Thus far, we have known savings of $33 million.

The combination of LRP and FRP create a win-win situation. Excess facilities either become utilized or are demolished. The Army reduces its lease costs and avoids maintaining excess facilities, thus leveraging its resources to the greatest degree possible. We make the moves on to an installation's budget neutral by picking up the additional RPM and BASOPS requirements.

The point of contact for additional information about the Army Facility Reduction Program or Lease Reduction Program is Monica Malia, (703) 692-9226 DSN 222, e-mail: maliamc@hqda.army.mil PWD

Submit your articles and photographs to the *Public Works Digest*

Department of the Army
US Army Corps of Engineers
Installation Support Center
ATTN: Editor, ***Public Works Digest,*** CEISC-P
7701 Telegraph Rd.
Alexandria, VA 22315-3862
Phone: (703) 428-6404 DSN 328
FAX: (703) 428-7926
e-mail: alex.k.stakhiv@usace.army.mil

Fort Bragg web site names that tune

by Kim Taylor

As more of us become semi-computer literate, the World Wide Web is like a new frontier. We explore the known and unknown. Some of us seek answers to questions. Others seek confirmation to answers we already know. We bookmark our favorite sites and hope that we have deleted the ones that we accessed by mistake. Web sites are fascinating, but the people who create them are the ones responsible for their effectiveness.

Ed Schwacke, pagemaster for the Environmental Branch of the Public Works Business Center at Fort Bragg, is one of these talented creators. He recently designed the Environmental Branch web site in an entertaining and informative manner.

At first access to their site, the visitor is greeted with a midi file instrumental version of Louis Armstrong's "What a Wonderful World." As you surf into the navigation page, a midi file instrumental of Jimmy Buffet's "Changes in Attitudes, Changes in Latitudes" echoes in the room. When you need to access information about underground storage tanks at Fort Bragg, the scientific, compliance, and regulatory jargon takes on a whole new appeal when serenaded by a midi version of "Pipeline" by The Ventures. Most of the pages at this site have music that makes the visit more intriguing and interesting.

While small ditties may seem to be fairly common place on most web pages, Schwacke uses his keen sense of humor and love of music throughout the site to enhance your visit. Schwacke's creative efforts extend beyond the music and into the organization and overall look of the pages.

Besides the creative presentation, this web site also offers helpful information to assist Fort Bragg soldiers and civilians with environmental information and issues. "I wanted our site to be a one-stop site for environmental information and requirements on Fort Bragg. Since technical information can be very dry, I tried to spice it up with some music, some midi files, and lots of pictures pertaining to our programs." Schwacke said. "Our presence in the office can vary during duty hours, since we also have field work to do. The soldiers may also work different hours than we do and occasionally on weekends, so the web site offers "on-call" service 24 hours a day by using the information highway to get the word out."

During the creation of the web site, the program managers within the Environmental Branch provided Schwacke with information about their programs. The initial time invested in the design of the site was, according to Schwacke, about ten hours. Updates are done almost daily.

The site also provides access to Fort Bragg's environmental regulations and forms, which can be downloaded in different formats. Microsoft Word and the PKZip format are used for the regulations, since most computer systems recognize their format. The graphics and text at Schwacke's web site promote easy reading and navigation. The search engine locates items not found on the frequently-asked-questions (FAQ) page. The FAQ page is effective in covering some common information applicable to many soldiers without the need to page through the entire web site. Most of these questions come from students who attend Fort Bragg's required environmental orientation courses.

The web site also links to a source for soldiers to download Material Safety Data Sheets (MSDS) needed for their unit hazardous material handling activities. It is a safety and environmental requirement to have these sheets at work sites, but it was difficult in the past to get them except through a visit across post to the Public Safety Business Center. "The units now have the ability to enhance safety and environmental compliance via cyberspace." said Schwacke.

The web site includes guidance about disposal of various waste streams, hazardous waste handling, recycling, post landfills and other solid waste information, environmental training courses, drinking water, wastewater, washracks, spill planning and response, pollution prevention, asbestos, lead-based paint, air emissions, and the restoration of sites which may have long-term contamination. Because environmental regulations and policies change periodically, the web site is the Environmental Branch's best way to publish the most current information.

The Environmental Branch also hopes to use the web site as a way to advise units about postwide environmental trends, lessons learned, success stories, or information about violations that state or EPA authorities have cited during visits to DOD installations.

You can visit the Fort Bragg Environmental Branch web site at http://www.bragg.army.mil/envbr or http://dragonnet.bragg.army.mil/envbr

POC is Kim Taylor, (910) 396-8931, e-mail: taylork@bragg.army.mil

PWD

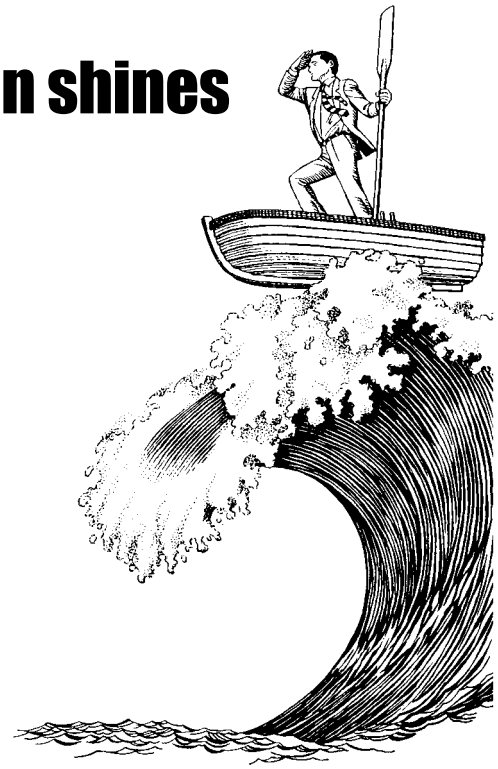
Kim Taylor is the Director of Public Relations at the Public Works Business Center at Fort Bragg, NC.

Are you on the *Digest* distribution list?

If not, give Alex Stakhiv a call at (703) 428-6404 DSN 328. Or better yet, e-mail alex.k.stakhiv@usace.army.mil. If you are requesting an address change, please include the old address as well as the new.

ISC's Sanitary and Chemical Division shines

by Robert W. Fenlason, III



The Sanitary and Chemical Division of the Installation Support Center's Engineering Directorate had many significant accomplishments in the past year. Chief among them were development of:

User Guide for Model Schedule of Services for developing a Wellhead Protection Program and Plan Development

A Wellhead Protection (WHP) Program protects the surface and subsurface areas around public water supply wells from contamination and meets the installation's state-specific requirements for WHP protection by addressing the following primary components:

- Delineation of the Wellhead Protection Area (WHPA) for each well.
- Inventory and location of potential contamination sources (PCS) within the WHPA.
- Inventory of PCS outside the immediate WHPA.
- Management Plan to control or eliminate the identified PCS.
- Wellhead Contamination Contingency Plans.
- Procedures for routine review and evaluation of WHP plans/programs.

This model was tested at two installations. The lessons learned from the specific field tests have been incorporated into the final product.

User Guide for Model Schedule of Services for developing a Cross-Connection Control Program

A Cross-Connection Control Program (CCCP) protects water quality in the installation water distribution system in the event contamination occurs. The Model Schedule of Services was developed to identify cross-connections between potable and any source of contamination or pollution (nonpotable), assess potential hazards to the public water system from the nonpotable sources, and provide installation officials with the information necessary to manage, control, and prevent contamination of pollution of the potable water system in the event backflow were to occur. Most states have established regulations that prohibit cross-connections and require water supply officials to install backflow prevention devices to protect the public water system. The model schedule of services addresses seven primary components.

A Users Guide was also developed to provide guidance on how to explain the features of the model schedule of services and meet state-specific requirements. This model was tested at two installations. The lessons learned from the specific field tests have been incorporated into the final product.

Model Water Distribution System Flushing System

A water distribution system flushing plan establishes the procedures for flushing public water systems to maintain high quality potable water and prolong the useful life of the water mains. A systematic flushing plan delineates the sequence for isolating and flushing each water main segment by identifying minimum hydrant pressures, minimum time period for effective velocity to remove sedimentation, and the minimum number of hydrants and valves to operate.

The plan also provides guidance on preparing a schedule indicating when to flush, how to provide customer notification, and how to comply with a State General Discharge Permit. Such a permit may require:

- Authorization to discharge water from flushing water mains.
- Implementing Best Management Practices (BMPs).
- Prevention of potential increase in the temperature of receiving waters.
- Prevention of erosion damage.

Water and Wastewater Compliance Assessment Protocol

A compliance assessment protocol establishes a systematic procedure for evaluating a water or wastewater system for compliance with all applicable environmental regulations. The protocols are intended to help responsible installation personnel evaluate the operational performance of existing water and wastewater systems and serve as a basis for identifying corrective actions necessary to achieve or ensure continued compliance, and develop related funding requirements. This protocol provides step-by-step procedures designed to evaluate existing treatment systems capabilities in meeting current and future regulatory requirements, assessing the operation and maintenance capabilities, and evaluating the physical condition of the system.

The results of the protocol form the basis for identifying the needed process modifications and the associated cost estimates to achieve compliance with current and future regulations, and provide the Army with essential information for planning and developing funding strategies to achieve full and sustained compliance at all installations.

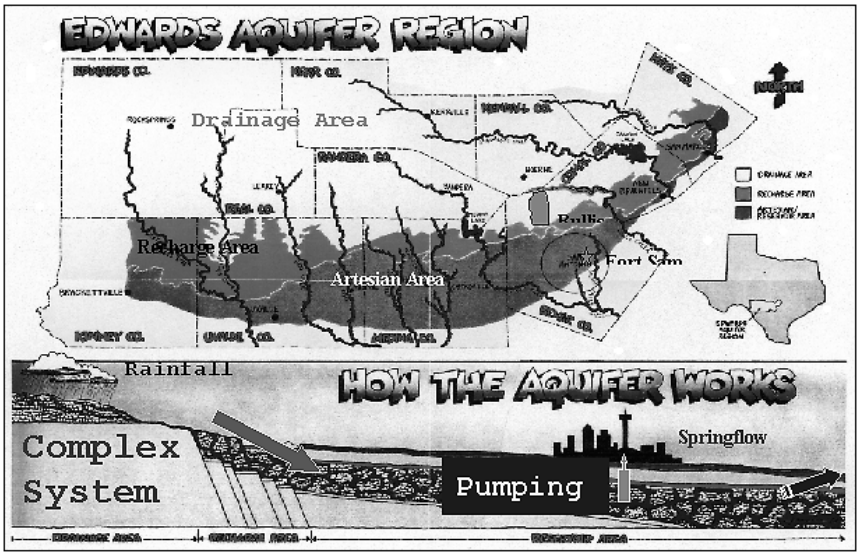
Each protocol was tested on three systems. The lessons learned from the specific field tests have been incorporated into the final protocol.

POC is Robert W. Fenlason, III, (703) 806-5201 DSN 656, e-mail: bob.w.fenlason@usace.army.mil PWD

Water conservation and reuse at Fort Sam Houston

by LTC Garrett J. Sullivan and Ms. Jackie Schlatter

Fort Sam Houston is aggressively pursuing development of an installation-wide recycled water system to reduce its reliance on the most critical source of water in southern Texas, the Edwards Aquifer (EA). This aquifer represents the sole source of water for more than 1.5 million people including Fort Sam Houston. The aquifer is not just an underground lake, but rather a complex system of underground rock formations permeated by water stretching over 11 counties in southern Texas. The water in the aquifer is replaced by runoff seeping through the rock formations and streams that lie within the recharge zone north of Fort Sam Houston. Major springs fed by the aquifer are the Comal and San Marcos springs, located approximately 40 miles east of Fort Sam Houston, which provide habitat for eight federal threatened and endangered species. The aquifer is in danger of overpumping and drawdown because of the region's growing population and increases in agricultural and industrial use which draw water faster than it can be replenished.



The San Antonio Water System (SAWS) has more than 35,000 acre-feet of reuse water available annually for potential customers. SAWS main recycled water lines are under construction throughout the southeastern and southwestern portions of San Antonio; one of these lines will traverse through Fort Sam Houston's northern boundary during the spring of 1999. The proximity of this new recycled water line has provided Fort Sam Houston with a superb opportunity to take advantage of recycled water. The installation will replace over 800 acre-feet of cooling tower and irrigation usage with recycled water, thereby reducing its reliance on the Edwards Aquifer and conserving potable water within the region.

Fort Sam Houston has developed a five-pronged water strategy to address the installation's future water requirements, including:

- Working to develop a regional solution to the oversubscribed EA.
- Refining the base water conservation program.
- Instituting a formal Water Installation Planning Board to address base water requirements for future missions and construction projects.
- Funding a major multimillion dollar upgrade project to overhaul an aging installation water infrastructure.
- Fielding a recycled water system.

The Reuse Water Committee, formed in August 1998, a subcommittee of the Water Installation Planning Board, worked aggressively with SAWS design engineers to identify areas throughout the base which maximize recycled water usage. Cooling towers, athletic fields, wash racks, facility irrigation systems, and the golf courses were incorporated into the final ReUse Water plan which was briefed to the SAWS board of directors in November 1998 and adopted for formal design and construction.

In partnership with Fort Sam Houston, SAWS agreed to construct approximately 36,000 feet of distribution system connecting 11 cooling towers, 4 athletic field complexes, 8 facility irrigation systems, and 2 golf courses on base to the SAWS Reuse Water system with a projected annual requirement of 820 acre-feet. In concert with installation engineers, SAWS water resource experts identified the optimal combination of distribution system lines, connection points/hook-ups, and on-site storage requirements to maximize Reuse water usage. The golf course detention pond will serve as the installation's only on-site storage capability and provide full service to the golf courses' irrigation system.

Tripling the pond's capacity to meet summer peak demand pumping requirements, without negatively impacting the golf flow, was a critical component of the design. An arched bridge was incorporated into the final plan to span the enlarged pond and meet golf requirements for continued play. Fort Sam Houston's main medical center complex (Brooke Army Medical Center) will become the first San Antonio hospital facility to use reuse water for cooling tower operation.

The design and construction connection requirements for this 4-tower system are complex since the current system draws over 88 acre-feet of water annually. The recycled water line for the medical center is designed to deliver a continuous flow to meet all hospital cooling requirements. In addition, the line to the hospital must traverse a major east-west railroad and two fiber-optic cables to link the medical center system to SAWS main recyled line. Although the estimated cost to SAWS to construct the Fort Sam Houston ReUse Water project exceeds $745,000 and the base will expend over $40,000 more per

Water/Wastewater System Management Workshop

The U.S. Army Environmental Center (AEC), in conjunction with the U.S. Army Installation Support Center (ISC), will sponsor a workshop to provide training on several products that have been jointly developed to assist installations in the management of their water and wastewater system. These products are:

- Water Compliance Assessment Protocol
- Wastewater Compliance Assessment Protocol
- Wellhead Protection Program Development — User Guide and Model Schedule of Services
- Cross-Connection Control Program Development — User Guide and Model Schedule of Services

During the workshop, training and instruction will be provided on the following subjects:

- The use of the water and wastewater assessment protocols developed to assess the capability of the water and wastewater systems to meet regulatory requirements based on its capacity, operation and maintenance, and physical condition.
- The key elements/components of cross-connection control and wellhead protection programs.
- The use of the Model Schedule of Services developed to assist personnel at military installations in contracting services to implement a cross-connection control program and develop wellhead protection plans.

The workshop is intended for installation personnel who have responsibilities related to the management of water/wastewater systems and/or implementation of wellhead protection or cross-connection control. It will be held at two different locations and times:

Atlanta, GA: 24-27 May 1999
Denver, CO: 7-10 June 1999

RASco, Inc., is coordinating and facilitating these workshops for us. For more information or to register, please contact Hans Graven at (703) 643-2952 DSN 328; FAX: (703) 497-2905; e-mail: RAScoWS@aol.com.

Attendance at this workshop will be limited. If you have other questions, please call Georgette Myers (410) 436-1203 or Bob Fenlason (703) 806-5201. PWD

Register for WinEst training

Enrollment for functional training classes for the WinEst commercial off the shelf (COTS) estimating program is now underway. All classes will be held at Fort Lee, Virginia, and are scheduled for April 27-29 and May 18-20, 1999. There are no tuition costs related to the class, but sites will be responsible for TDY funding.

Each class is 3 days in length and will provide training on the functional usage of the WinEst program and have extensive discussions and demonstrations on how data from a WinEst estimate can be applied to an IFS Work Estimating document. The WinEst program has been distributed to sites running IFS to be used as a "TOOL" for enhancing the estimating function. It does not replace or interface with the IFS Work Estimating module.

For more information, please contact Wayne Brown at (804) 734-0231 or Jim Godwin at (804) 734-2642. PWD

(continued from previous page)

year to use recycled water vice Edwards Aquifer water, the real savings in potable water for the region and endangered species are immeasurable.

Construction of the reuse water infrastructure on Fort Sam Houston will begin in late Spring 1999 and conclude by the end of the calendar year. It is expected that potable savings on cooling towers will approximate 177 acre-feet while savings on irrigation areas will total over 643 acre-feet per year. Total installation savings of Edwards Aquifer water is currently projected at over 820 acre-feet per year or 27percent of the installation's annual water budget.

In recognition of its efforts, Fort Sam Houston received the 1998 Water Conservation and ReUse Award for small utilities from the Texas Section of the American Water Works Association. This award was presented to members of the ReUse Water Committee on 7 April at the Texas Water '99 Convention in Fort Worth.

As one of the nation's leaders in pursuing water conservation goals, the U.S. Army and Fort Sam Houston are fully committed to protecting our nation's water resources as an integral component of the installation mission. Fort Sam Houston's vision is to incorporate sound environmental practices into all facets of the military mission because good environmental stewardship demands no less.

POC is Jackie Schlatter, (210) 221-5093, e-mail: jackie_schlatter@smtplink.medcom1.amedd.army.mil PWD

LTC Garrett J. Sullivan is the U.S. Army Medical Command Engineer and Chief of the DPW Operations Division within the Assistant Chief of Staff for Installations, Environment and Facility Management Directorate, U.S. Army Medical Command HQ. Ms. Jackie Schlatter is the Chief of the Cultural and Natural Resources Division for the Environmental Office of the Fort Sam Houston Directorate of Public Works.

Public Works Digest

In This Issue:

IFS Update:

✔ SCP #12-00 changes

✔ IFS-CS interface with DPAS

✔ IFS Contract Management System

✔ Supply 2000 COTS

✔ IFS Cookbook

✔ Transfer of IFS maintenance and support